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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/676,333	09/29/2000	Paul J. Schneider	RAYT:013	3169

7590 06/23/2005

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EXAMINER

CHEVALIER, ROBERT

ART UNIT	PAPER NUMBER
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2616

DATE MAILED: 06/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/676,333

Applicant(s)

SCHNEIDER ET AL.

Examiner

Bob Chevalier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30-33 is/are allowed.
- 6) ☒ Claim(s) 1-29 and 34-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/12/04</u> . | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicant's arguments with respect to claims 1-41 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5-6, 8-10, and 26, are rejected under 35 U.S.C. 102(b) as being anticipated by the submitted prior art of Tait et al (WO 97/23075).

The submitted prior art of Tait et al disclose a video data recording apparatus that shows all the limitations recited in claims 1, 5, and 26, including the feature of the video data compression unit generating compressed digital video data (See Tait et al's Figure 1, component 36, and page 16, lines 26-30), the feature of the video data recorder being capable of recording compressed digital video data in catastrophic event-survivable form (See Tait et al's Figure 1, components 30, 32, 30), the feature of the video data interface in signal communication between the compressor and the recorder, the interface being capable of converting the compressed video data to a compressed video data suitable for recording by the video data recorder (See Tait et al's Figure 1, components 32, and 34), and the feature of the recorder being a solid state video data recording unit of a non-modified conventional flight data recording unit

as specified in the present claims 1, 5, and 26 (See Tait et al's Figure 1, component 24, 30, and page 3, line 6, and page 14, lines 4-6).

With regard to claim 2, the feature of the video data interface configured to modify the bandwidth and frame format of the compressed video data as specified thereof would be present in Tait et al. (See Tait et al's page 22, lines 21-31)

With regard to claim 3, the feature of the compression unit being capable of converting inputted analog video data to the compressed digital video data as specified thereof is present in the cited reference of Tait et al. (See the signal conversion circuitry shown in Tait et al's Figure 1, component 36).

With regard to claim 6, the feature of the video camera generating analog video data to the compression unit as specified thereof is present in Tait et al. (See Tait et al's Figure 1, component 22).

With regard to claim 8, the feature of the system being configured for installation on a vehicle as specified thereof is present in Tait et al. (See Tait et al's page 2, lines 23-29).

With regard to claims 9-10, Tait et al disclose the feature of the event-survivable recorder (See the above rejection of claim 1), and the feature of the system being configured to be installed on an aircraft, land-based or sea-based facility as specified in the present claims 9-10. (See Tait et al's page 3, lines 4-9).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 4, 11-20, 22, and 27, are rejected under 35 U.S.C. 103(a) as being unpatentable over the submitted prior art of Tait et al (WO 97/23075) in view of the submitted prior art of "Raytheon System Company, if a picture is worth a thousand words..."

It is noted that the cited reference of Tait et al discloses substantially the same limitations recited in the present claims 4, 11, 15, and 19, including the feature of the interface. (See the above rejection of claim 3).

It is noted that the cited reference of Tait et al fails to specifically disclose the feature of the recorder being capable of recording the compressed video data at rate of about 256 Kbps as specified in the present claims 4, and 19, or of about 250 as specified in claims 11, and 15.

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The submitted prior art of Raytheon System Company does disclose the feature of the recorder being capable of recording the compressed video data at rate of 250 Kbps (which 250 Kbps would also reasonably be read on the claimed limitation of claims 4, and 19, of about 256 Kbps, when given the broadest interpretation; since, it is to be recognized that about 256 Kbps is not exactly 256 Kbps). (See the first two lines of the third paragraph shown in the submitted prior art of Raytheon System Company).

It would have been obvious to one skilled in the art to modify the Tait et al's recording apparatus wherein the recording means provided thereof would incorporate the capability of recording the compressed video data at rate of about 250 Kbps in the same conventional manner as shown by Raytheon System Company. The motivation is to increase the speed of the recording operation as suggested by Raytheon System Company.

With regard to claims 14, 16, and 22, Tait et al disclose the feature of the event-survivable recorder. (See the above rejection of claim 1) and the feature of the system being configured to be installed on an aircraft, land-based or sea-based facility as specified in the present claims 14, 16, and 22. (See Tait et al's page 3, lines 4-9).

With regard to claims 12, 17, and 27, it is noted that the proposed combination of Tait et al and Raytheon System Company indicated above discloses substantially the same limitations recited in the present claims 12, 17, and 27, including the feature of the recording means (See Tait et al's Figure 1, component 30).

The proposed combination fails to specifically disclose the feature of the recording unit capable of saving at least about 30 minutes of compressed video data prior to catastrophic event as specified in the present claims 12, 17, and 27.

It is noted that the submitted reference of Raytheon System Company discloses a recording system installed in an airplane. It further noted that the Raytheon System Company's recording means includes the capability of saving at least about 30 minutes of compressed video data prior to catastrophic event as specified in the present claims 12, 17, and 27. (See the first two lines of the third paragraph shown in the submitted prior art of Raytheon System Company).

It would have been obvious to one skilled in the art to modify the proposed combination of Tait et al and Raytheon System Company indicated above wherein the recording means provided thereof would incorporate the capability of saving at least about 30 minutes of compressed video data prior to catastrophic event in the same conventional manner as shown by Raytheon System Company. The motivation is to have a better understanding of the recorded data at reproduction as suggested by Raytheon System Company, thereby increase the efficiency of the apparatus.

With regard to claims 13, 18, and 20, the feature of the video camera generating analog video data to the compression unit as specified thereof is present in the proposed combination of Tait et al and Raytheon System Company indicated above in the rejection of claims 4, and 11. (See Tait et al's Figure 1, component 22).

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7. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over the submitted prior art of Tait et al and Raytheon System Company as applied to claim 16 above, and further in view of the submitted prior art of Feher (P.N. 4,816,828).

The proposed combination of Tait et al and Raytheon System Company indicated in the above rejection of claim 16 discloses a video data recording system in an aircraft which discloses substantially the same limitations recited in claim 23, including the feature of recording compressed video data of the aircraft on a recording unit. (See the above rejection of claim 16).

The proposed combination of Tait et al and Raytheon System Company fails to specifically disclose the feature of the video processor, the control cockpit unit, and the display unit, wherein the control cockpit unit is configured to generate control signal to the video processor so as to control the video processor to output received video data to the input of the control cockpit unit and wherein the cockpit control unit would output said video data to the display unit as specified in the present claim 23.

However, it is to be noted that all such features indicated above would be inherently present in the submitted prior art of Feher. Because, Feher discloses a video data recording system being installed in an aircraft, which system includes the capability of playing back recorded video data on a display means. It is noted that said Feher's recording system has the capability of generating control signal from a control unit located in a cockpit control area for the purpose of playing back recorded video data from a recording unit and displaying the played back video data on a display unit

located on the cockpit area. Applicant's attention is directed to Feher's Figure 4, and the corresponding disclosure.

It would have been obvious to one skilled in the art to modify the proposed combination's recording system indicated above wherein the recording means provided thereof would incorporate the capability of generating control signal from a control unit located in a cockpit control area of the aircraft for the purpose of playing back recorded video data from a recording unit and displaying the played back video data on a display unit located on the cockpit area in the same conventional manner as shown by the submitted prior art of Feher. The motivation is to give the pilot of the aircraft a better control over the aircraft as suggested by Feher.

8. Claims 7, 21, are rejected under 35 U.S.C. 103(a) as being unpatentable over the submitted prior art of Tait et al, and "Raytheon System Company, if a picture is worth a thousand words..." as applied to claims 15-18 above, and further in view of Fujioka.

The proposed combination of the submitted prior arts of Tait et al and Raytheon System Company indicated above discloses a video data recording apparatus that shows substantially the same limitations recited in claims 7, and 21, including the feature of compressing the video data and recording the compressed video data in a recording unit as specified in the present claims 7, and 21. (See the above rejection of claims 15, and 16).

The proposed combination of the submitted prior arts of Tait et al and Raytheon System Company fails to specifically disclose the feature of reproducing the

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compressed recorded video data from the recording unit and providing said compressed video playback data to the compression unit wherein the compression unit is arranged in a manner to convert said received compressed video playback data into analog video playback data and output the same as specified in the present claims 7, and 21.

Fujioka discloses a video data recording and reproducing apparatus which includes the capability of a compressing unit for compressing inputted video data and recording the same compressed video data into a recording unit. It is further noted that the Fujioka's recording/reproducing apparatus includes the capability of reproducing the compressed recorded video data from the recording unit and providing said compressed video playback data to the compression unit wherein the compression unit is arranged in a manner to convert said received compressed video playback data into analog video playback data and output the same as specified in the present claims 7, and 21. (See Fujioka's Figure 3, components 55, 52, 56, 59, and the DV CODEC).

It would have been obvious to one skilled in the art to modify the proposed combination of Tait et al and Raytheon System Company indicated above wherein the compressing/recording means provided thereof would incorporate the capability of reproducing the compressed recorded video data from the recording unit and providing said compressed video playback data to the compression unit wherein the compression unit is arranged in a manner to convert said received compressed video playback data into analog video playback data and output the same in the same conventional manner as shown by Fujioka. The motivation is to retrieve the recorded video data and output the same at any desired time as suggested by Fujioka.

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9. Claims 24-25, and 28, are rejected under 35 U.S.C. 103(a) as being unpatentable over the submitted prior arts of Tait et al , Raytheon System Company, and Fujioka as applied to claims 7, and 21 above, and further in view of the submitted prior art of Feher (P.N. 4,816,828)

The proposed combination of Tait et al, Raytheon System Company, and Fujioka indicated in the above rejection of claims 7 and 21, discloses a video data recording/reproducing system in an aircraft which discloses substantially the same limitations recited in claims 24-25, including the feature of recording/reproducing compressed video data of the aircraft on/from a recording unit. (See the above rejection of claims 7, and 21).

The proposed combination fails to specifically disclose the feature of the system including a cockpit control unit for controlling said recording unit and playback modes of said compression unit and said video data recording unit so as to control recording of the video data from a video camera by the recording unit, to control display of the video playback by a video display as specified in the present claims 24-25.

However, it is to be noted that all such features indicated above would be inherently present in the submitted prior art of Feher. Because, Feher discloses a video data recording/reproducing system being installed in an aircraft, which system includes the capability of playing back compressed recorded video data on a display means. It is noted that said Feher's recording/reproducing system has the capability of generating control signal from a control unit located in a cockpit control area for the purpose of playing back compressed recorded video data from a recording unit and displaying the

played back video data on a display unit located on the cockpit area. Applicant's attention is directed to Feher's Figure 4, and the corresponding disclosure.

It would have been obvious to one skilled in the art to modify the proposed combination's recording/reproducing system indicated above wherein the compressing/recording means provided thereof would incorporate the capability of generating control signal from a control unit located in a cockpit control area of the aircraft for the purpose of playing back compressed recorded video data from a recording unit and displaying the played back video data on a display unit located on the cockpit area in the same conventional manner as shown by the submitted prior art of Feher. The motivation is to give the pilot of the aircraft a better control over the aircraft as suggested by Feher.

With regard to claim 28, the feature of converting the compressed digital video playback data to a modified compressed playback signal suitable for processing the video compression unit and decompressing the modified compressed playback signal in a video compression unit to form a decompressed playback signal as specified thereof is present in the proposed combination of Tait et al, Raytheon System Company, Fujioka and Feher indicated above. (See the above rejection of claims 7, and 21).

10. Claims 29, 34-41, are rejected under 35 U.S.C. 103(a) as being unpatentable over the submitted prior arts of Tait et al , Raytheon System Company, Fujioka, and Feher as applied to claims 24-25, and 28, above, and further in view of Official Notice.

The proposed combination of Tait et al , Raytheon System Company, and Fujioka, and Feher indicated above discloses a video recording/reproducing apparatus

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that shows substantially the same limitations recited in claims 29, and 34-41, including the feature of recording and playback the video data as specified in the present claims 29, and 34-41. (See the above rejection of claims 24-25).

The proposed combination fails to specifically disclose the feature of displaying the reproduced video data simultaneously with recording of new video data as specified in the present claims 29, and 34-41.

Examiner takes Official Notice in that it is notoriously well known in the video recording/reproducing art to have recording and reproducing of video data being performed simultaneously on and from a recording medium as claimed.

It would have been obvious to one skilled in the art to modify the proposed combination's recording/reproducing apparatus indicated above wherein the recording/reproducing means provided thereof would incorporate the capability of performing recording and reproducing of the video data on and from the recording medium at the same time in the same conventional manner as is well known in the prior art. Examiner has taken Official Notice. The motivation is to be able to perform recording or reproducing at any desired time as suggested in the prior art.

11. Claims 30-33 contain allowable subject matter over the prior art of record.

12. The following is a statement of reasons for the indication of allowable subject matter:

The claimed invention is directed to a catastrophic event-survivable video recording system. The independent claims identify the feature of "the video data recording unit comprises a conventional flight data recording unit including a processor,

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said conventional flight data recording unit being manufactured so that said processor runs at a first processing speed; and wherein said conventional flight data recording unit is configured with a software modification to cause said processor to run at a second processing speed, said second processing speed being faster than said first processing speed". The closest prior art, Tait et al discloses a conventional catastrophic event-survivable recording apparatus, either singularly or in combination fail to anticipate or render the above underlined limitations obvious.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bob Chevalier whose telephone number is 571-272-

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7374. The examiner can normally be reached on MM-F (9:00-6:30), second Monday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on 571-272-7950. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

B. Chevalier
June 21, 2005.


ROBERT CHEVALIER
PRIMARY EXAMINER